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54 A system of functional units for performing logic functions.

57 According to the invention, the LSI testing methods allow the states of combinational logic networks to be captured in either a group of master latches (390) or slave latches (400) of shift registers used for performing scan-in/scan-out operations on test data (test patterns, result patterns), but not both.

If on a particular test the states are captured in the master latches, then each master latch state is subsequently shifted to the corresponding slave latch by the application of a shift clock, as known from the art.

If instead the states are captured in the slave latches the slave latches can be immediately shifted out for inspection.

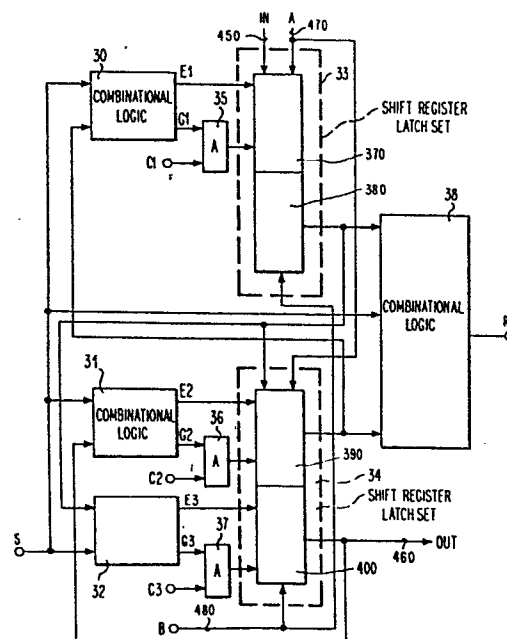


FIG. 7



European Patent  
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# EUROPEAN SEARCH REPORT

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EP 80 10 3967

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
	<p>IBM TECHNICAL DISCLOSURE BULLETIN, vol. 22, no. 2, July 1979 New York, US</p> <p>BERGLUND et al. "Effective use of level sensitive scan design", pages 730-734.</p> <p>* Page 730, lines 1-6; figures 1,4; page 734, lines 5-30 *</p> <p>--</p>	1,4	G 06 F 11/26
AD	<p>US - A - 3 783 254 (IBM)</p> <p>* Column 10, lines 48-67; column 11, lines 1-20; column 13, lines 12-67; column 14, lines 11-22; figures 7,9,12, 13 *</p> <p>-----</p>	1,3	<p>TECHNICAL FIELDS SEARCHED (Int. Cl. 3)</p> <p>G 06 F 11/26</p>
			<p>CATEGORY OF CITED DOCUMENTS</p> <p>X: particularly relevant A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: conflicting application D: document cited in the application L: citation for other reasons</p>
<p><input checked="" type="checkbox"/> The present search report has been drawn up for all claims</p>			<p>&amp;: member of the same patent family, corresponding document</p>
Place of search The Hague		Date of completion of the search 21-05-1981	Examiner DHEERE